

Technical Branch
Technical Group
Traffic Signal Series

TRAFFIC SIGNAL MAINTENANCE SUPERVISOR

12/03 (AIS)

General Purpose

Under general supervision, oversee and perform daily operation and maintenance of traffic signals.

Typical Duties

Plan, schedule, direct and engage in traffic signal upkeep, repair and installation. Involves: Respond to emergency calls for power outages and traffic signal knockdowns. Mend, replace and reconnect aerial and underground communications, signal cable, PVC conduit and burnt out bulbs. Troubleshoot traffic controller cabinets and field related problems. Verify indicators and system operation. Troubleshoot, calibrate and repair various types of electronic circuits to component level used in traffic control system. Ensure proper operation and synchronization of masters, secondary controllers and flashers. Setup, rectify and replace fiber optics communication systems, digital data communication, close circuits television and infrared detection systems. Modify and upgrade traffic signals and controller cabinets. Read, interpret and work from schematics, blue prints and technical manuals. Operate testing equipment. Recommend changes or modification of equipment to improve traffic movement. Schedule and implement preventive maintenance programs. Keep equipment maintenance records. Maintain maps, prints and diagrams pertinent to equipment and signalized intersections, aerial and underground interconnect cable runs. Keep inventory control of equipment and components. Order spare parts. Comply with and enforce safety regulations.

Coordinate and work with other city departments and outside entities. Involves: Interface with traffic engineers on intersection design, signal plans, signal upgrades, modifications, coordination and time setting. Attend pre-construction meetings to keep up to date on construction projects related to traffic signals. Inspect field work and new intersections done by outside entities to ensure compliance with project plans and specifications. Meet with factory representative to solve equipment difficulties. Oversee mast arms installations, conduits layouts, cable pulling, signal heads and controller cabinet wire ups in new intersections and school flasher installations. Test and verify indications, cabinets, controller settings and system operation before and after setting intersection to normal operation.

Supervise assigned staff. Involves: Schedule, assign, guide and check work. Review operational and procedural activities. Prioritize and coordinate unit activities. Appraise employee performance. Engage in or arrange for employee training and development. Enforce personnel rules, regulations, department policies, and work standards regarding attendance and conduct.

Perform related incidental duties contributing to realization of unit or team objectives as required. Involves: Substitute for supervisor or coworkers during temporary absences, as qualified, by performing specific duties sufficient to maintain continuity of ordinary operations, if delegated. Provide designated support for projects or activities of other employees as instructed. Explain and demonstrate work performed to assist supervisor in training less knowledgeable employees. Maintain tools, equipment, materials and supplies, and keep work area orderly, safe and clean.

Knowledge, Abilities and Skills

- Considerable knowledge of traffic signal and flashing light maintenance methods, practices and operations.
- Considerable knowledge of digital data communication, close circuits television systems, fiber optic systems, microwave communication systems, video and wireless detection systems and Local Area Networks.
- Considerable knowledge of electronic control systems, practices and procedures related to traffic signal technology.
- Considerable knowledge of Texas Manual on Uniform Traffic Control Devices.
- Ability to identify and correct traffic systems field problems.
- Ability to interpret various plans, blueprints and diagrams related to road construction and signal installation codes and regulations.
- Ability to interpret oral, written, mathematical, legal, statistical and regulatory information dealing with transportation rules, regulations codes, ordinances and standards.
- Ability to objectively supervise and train subordinates.

- Ability to maintain effective working relationships with vendors, contractors, city officials, public safety personnel, city employees, regulatory agencies, inspectors, and the public.
- Skill in safe operation and care of motor vehicle, equipment and tools, personal computer or network workstation, and generic business productivity software.

Other Job Characteristics

- Frequent exposure to adverse conditions, uneven or unstable terrain, confined spaces, high voltage, climbing ladders, hazardous materials, chemicals, air or water borne pathogens, and traffic monitoring during construction work and on-site inspections.
- Frequent lifting and carrying of heavy weight objects (up to 50 pounds).
- Frequent driving through City traffic.
- Frequent work at heights of up to 20 feet.

Minimum Qualifications

Education and Experience: Equivalent of a high school diploma or General Education Development (GED) supplemented by a recognized one (1) year postsecondary technician vocational electronics training program and six (6) years practical experience in electronic work, plus four (4) years experience in the installation and maintenance of traffic controllers and traffic signals.

Licenses and Certificates:

- Certificate of completion of electronic technician training program.
- International Municipal Signal Association Level I and Level II Certification within one (1) year of appointment.
- Texas Class "C" Driver's License or equivalent from another state.

Special Requirements:

- Subject to on-call during non-working hours and mandatory recall.

Human Resources Director

Department Head